

Notice of Allowability

Application No.

09/779,763

Examiner

Syed J. Ali

Applicant(s)

PARKES ET AL

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed April 18, 2005.
2. ☒ The allowed claim(s) is/are 1-5, 7-17 and 19-41, renumbered as claims 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date September 20, 2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
PATENT CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Lee on September 22, 2005.

2. **The application has been amended as follows:**

(i) Replace claim 12 as follows:

A method of performing a task on a computer system having a cache, wherein the task comprises a plurality of sub-tasks, the method comprising:

creating a plurality of instances of a stage for each sub-task, wherein each stage comprises:

a holding area; and

a scheduling policy;

receiving a plurality of requests for the task;

for each request, placing one or more work packets in the holding area, each work packet corresponding to an iteration of the sub-task required for the task and containing data for performing the sub-task; and

performing the sub-task on each work packet in the holding area of the stage in accordance with the scheduling policy of the stage while refraining from executing other sub-tasks of the task, thereby maintaining data locality in the cache for the sub-task.

(ii) Replace claim 19 as follows:

A system for executing a procedure on a computer, wherein the procedure is divided into a plurality of sub-tasks, the system comprising:

- a computer-readable medium having stored thereon a plurality of work packets, each work packet including data usable to perform an iteration of a sub-task of the plurality of sub-tasks;

- a computer-readable medium having stored thereon a plurality of stages, there being at least one stage for each sub-task, each stage comprising:

- a holding area for holding a batch of the plurality of work packets; and

- a scheduling policy; and

- receiving a plurality of requests for the task;

- a processor for identifying a stage of the plurality of stages and for each request, performing an iteration of the stage's sub-task on each of the batch of work packets in accordance with the scheduling policy of the stage while refraining from executing other sub-tasks of the task, thereby maintaining locality of data in a cache of the processor.

(iii) Replace claim 36 as follows:

A computer-readable medium having stored thereon computer-executable instructions for a method of performing a task on a computer system having a cache, wherein the task comprises a plurality of sub-tasks, the method comprising:

creating a plurality of instances of a stage for each sub-task, wherein each stage comprises:

a holding area; and

a scheduling policy;

receiving a plurality of requests for the task;

for each request, placing one or more work packets in the holding area, each work packet corresponding to an iteration of the sub-task required for the task and containing data for performing the sub-task; and

performing the sub-task on each work packet in the holding area of the stage in accordance with the scheduling policy of the stage while refraining from executing other sub-tasks of the task, thereby maintaining data locality in the cache for the sub-task.


(iv) Claims 42-46 are cancelled.


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed J. Ali whose telephone number is (571) 272-3769. The examiner can normally be reached on Mon-Fri 8-5:30, 2nd Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T. An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Syed Ali
September 23, 2005


MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNICAL CENTER 2100